

## EAST Search History

## EAST Search History (Prior Art)

| Ref # | Hits | Search Query   | DBs             | Default Operator | Plurals | Time Stamp       |
|-------|------|--|-----------------|------------------|---------|------------------|
| S1    | 986  | (determining or determine or detect or detecting) with kinetic with binding        | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 20:05 |
| S2    | 410  | S1 and (channel or microchannel)   | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 20:14 |
| S3    | 49   | S1 and ((channel or microchannel) with (spot or microspot or array or microarray)) | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 20:14 |
| S4    | 26   | S3 not @ay> "2004"   | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 20:15 |
| S5    | 986  | (determining or determine or detect or detecting) with kinetic with binding        | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 21:48 |
| S6    | 49   | S5 and ((channel or microchannel) with (spot or microspot or array or microarray)) | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 21:48 |
| S7    | 26   | S6 not @ay> "2004"   | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 21:48 |
| S8    | 986  | (determining or determine or detect or detecting) with kinetic with binding        | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 23:21 |
| S9    | 49   | S8 and ((channel or microchannel) with (spot or microspot or array or microarray)) | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 23:21 |
| S10   | 26   | S9 not @ay> "2004"   | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 23:21 |
| S11   | 23   | S9 not S10   | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 23:21 |
| S12   | 410  | S8 and (channel or microchannel)   | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 23:24 |
| S13   | 23   | S12 not S11  | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 23:24 |
| S14   | 387  | S12 not S11  | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 23:24 |
| S15   | 305  | S14 not @ay> "2004"  | US-PGPUB; USPAT | OR               | ON      | 2008/03/22 23:24 |

|     |      |   |                 |    |    |                  |
|-----|------|---|-----------------|----|----|------------------|
| S16 | 801  | (microspot or microarray or spot or array) with (channel or microchannel) with (around or circumference)  | US-PGPUB; USPAT | OR | ON | 2008/03/26 11:29 |
| S17 | 180  | ((microspot or microarray or spot or array) with (channel or microchannel) with (around or circumference)) and (molecule or biomolecule or dna or nucleic or protein or antibody or enzyme) | US-PGPUB; USPAT | OR | ON | 2008/03/26 11:29 |
| S18 | 145  | S17 not @ay> "2004"   | US-PGPUB; USPAT | OR | ON | 2008/03/26 11:30 |
| S19 | 1096 | ((mountable or mounting) with ((flow adj cell) or channel)) and (assay or biological or molecule or antibody or dna or nucleic or enzyme or peptide)  | US-PGPUB; USPAT | OR | ON | 2008/03/26 15:29 |
| S20 | 782  | S19 not @ay> "2003"   | US-PGPUB; USPAT | OR | ON | 2008/03/26 15:30 |
| S21 | 46   | ((mountable) with ((flow adj cell) or channel)) and (assay or biological or molecule or antibody or dna or nucleic or enzyme or peptide)  | US-PGPUB; USPAT | OR | ON | 2008/03/26 15:31 |
| S22 | 39   | S21 not @ay> "2003"   | US-PGPUB; USPAT | OR | ON | 2008/03/26 15:31 |
| S23 | 987  | (determining or determine or detect or detecting) with kinetic with binding   | US-PGPUB; USPAT | OR | ON | 2008/03/29 20:45 |
| S24 | 410  | S23 and (channel or microchannel)   | US-PGPUB; USPAT | OR | ON | 2008/03/29 20:45 |
| S25 | 49   | S23 and ((channel or microchannel) with (spot or microspot or array or microarray))   | US-PGPUB; USPAT | OR | ON | 2008/03/29 20:45 |
| S26 | 26   | S25 not @ay> "2004"   | US-PGPUB; USPAT | OR | ON | 2008/03/29 20:45 |
| S27 | 987  | (determining or determine or detect or detecting) with kinetic with binding   | US-PGPUB; USPAT | OR | ON | 2008/03/29 20:45 |
| S28 | 49   | S27 and ((channel or microchannel) with (spot or microspot or array or microarray))   | US-PGPUB; USPAT | OR | ON | 2008/03/29 20:45 |

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|-----|------|---|--------------------|----|----|---------------------|
| S29 | 26   | S28 not @ay> "2004"   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S30 | 987  | (determining or determine<br>or detect or detecting)<br>with kinetic with binding   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S31 | 49   | S30 and ((channel or<br>microchannel) with (spot<br>or microspot or array or<br>microarray))  | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S32 | 26   | S31 not @ay> "2004"   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S33 | 23   | S31 not S32   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S34 | 410  | S30 and (channel or<br>microchannel)  | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S35 | 23   | !S33  | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S36 | 387  | S34 not S33   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S37 | 305  | S36 not @ay> "2004"   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S38 | 801  | (microspot or microarray<br>or spot or array) with<br>(channel or microchannel)<br>with (around or<br>circumference)  | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S39 | 180  | ((microspot or microarray<br>or spot or array) with<br>(channel or microchannel)<br>with (around or<br>circumference)) and<br>(molecule or biomolecule<br>or dna or nucleic or<br>protein or antibody or<br>enzyme) | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S40 | 145  | S39 not @ay> "2004"   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S41 | 1096 | ((mountable or mounting)<br>with ((flow adj cell) or<br>channel)) and (assay or<br>biological or molecule or<br>antibody or dna or nucleic<br>or enzyme or peptide)   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |
| S42 | 782  | S41 not @ay> "2003"   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/29<br>20:45 |

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|-----|------|--|-----------------|----|----|------------------|
| S43 | 46   | ((mountable) with ((flow adj cell) or channel)) and (assay or biological or molecule or antibody or dna or nucleic or enzyme or peptide) | US-PGPUB; USPAT | OR | ON | 2008/03/29 20:45 |
| S44 | 39   | S43 not @ay> "2003"  | US-PGPUB; USPAT | OR | ON | 2008/03/29 20:45 |
| S45 | 8499 | removable with (channel or (flow adj cell))  | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:01 |
| S46 | 7350 | S45 not @ay> "2004"  | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:01 |
| S47 | 566  | S46 and (absorb or immobilize or immobilizing or functionalizing)  | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:01 |
| S48 | 67   | S46 and ((absorb or immobilize or immobilizing or functionalizing) same (molecule or probe or dna or protein or enzyme or antibody))     | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:02 |
| S49 | 67   | S48 not S43  | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:02 |
| S50 | 2054 | ((microarray or array) with (formation or making)) same channel  | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:15 |
| S51 | 1551 | S50 not @ay> "2003"  | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:16 |
| S52 | 1010 | ((microarray or array) with (formation or making)) with channel  | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:16 |
| S53 | 4    | ((microarray or array) with (formation or making)) with (channel with (immobilizing or absorbing or activation or functionalizing))      | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:17 |
| S54 | 442  | ((microarray or array) with (formation or making)) and (channel with (immobilizing or absorbing or activation or functionalizing))       | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:17 |
| S55 | 345  | S54 not @ay> "2004"  | US-PGPUB; USPAT | OR | ON | 2008/03/29 21:17 |
| S56 | 5034 | (forming with (array or microarray)) same (channel or microchannel)  | US-PGPUB; USPAT | OR | ON | 2008/03/30 22:53 |

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|-----|---------|---|-----------------|----|----|------------------|
| S57 | 39      | ((immobilizing or functionalizing or functionalization) with (array or microarray)) same (channel or microchannel)  | US-PGPUB; USPAT | OR | ON | 2008/03/30 22:53 |
| S58 | 13      | (activating with (immobilizing or immobilization or functionalizing or functionalization)) same (microspot or array or microarray)  | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:04 |
| S59 | 0       | (activating with (immobilizing or immobilization or functionalizing or functionalization)) same (microspot or array or microarray) with (electric or electrical or current) | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:04 |
| S60 | 2603210 | ((immobilizing or immobilization or functionalizing or functionalization) with (microspot or array or microarray) with electric or electrical or current)                   | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:05 |
| S61 | 55      | (immobilizing or immobilization or functionalizing or functionalization) with (microspot or array or microarray) with (electric or electrical or current)                   | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:06 |
| S62 | 48      | S61 and (biomolecule or molecule or probe or protein or dna or nucleic or antibody)   | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:06 |
| S63 | 30      | S62 and (channel or microchannel)   | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:07 |
| S64 | 18      | S62 not S63   | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:14 |
| S65 | 102     | microfluidic and (immobilized with probes with (channel or microchannel))   | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:24 |
| S66 | 16      | S65 and ((electrophoretic or dielectrophoresis or electrophoresis) with (pumping or pump))  | US-PGPUB; USPAT | OR | ON | 2008/03/30 23:25 |

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|-----|------|---|--------------------|----|-----|---------------------|
| S67 | 1    | ("6200814").PN.   | USPAT;<br>USOCR    | OR | OFF | 2008/03/30<br>23:31 |
| S68 | 0    | (prevent with nonspecific with absorption) with (array or microarray)   | USPAT              | OR | OFF | 2008/03/30<br>23:34 |
| S69 | 3    | (prevent with nonspecific with absorption) and (array or microarray)  | USPAT              | OR | OFF | 2008/03/30<br>23:34 |
| S70 | 1    | ((nonspecific with absorption) with (avidin or streptavidin)) and (array or microarray)   | USPAT              | OR | OFF | 2008/03/30<br>23:36 |
| S71 | 1    | ((nonspecific with absorption) with (avidin or streptavidin)) and immobilization  | USPAT              | OR | OFF | 2008/03/30<br>23:38 |
| S72 | 4    | ((nonspecific with absorption) with (avidin or streptavidin))   | USPAT              | OR | OFF | 2008/03/30<br>23:38 |
| S73 | 3    | S72 not S71   | USPAT              | OR | OFF | 2008/03/30<br>23:38 |
| S74 | 3    | ((nonspecific with absorption) with coating) and immobilization   | USPAT              | OR | OFF | 2008/03/30<br>23:40 |
| S75 | 18   | ((nonspecific with (absorption or adsorption)) with coating) and immobilization   | USPAT              | OR | OFF | 2008/03/30<br>23:40 |
| S76 | 18   | S75 not S73   | USPAT              | OR | OFF | 2008/03/30<br>23:40 |
| S77 | 306  | ((surface adj plasmon adj resonance) or spr) and ((reflectance or (phase adj change) or angle or wavelength) with binding)                | USPAT              | OR | OFF | 2008/03/31<br>00:32 |
| S78 | 30   | ((surface adj plasmon adj resonance) or spr) and ((reflectance or (phase adj change) or angle or wavelength) with binding with detection) | USPAT              | OR | OFF | 2008/03/31<br>00:32 |
| S79 | 1622 | assay with ((dissociation or association or affinity) adj constant)   | US-PGPUB;<br>USPAT | OR | ON  | 2008/03/31<br>00:46 |
| S80 | 219  | assay with ((dissociation or association or affinity) adj constant) with (determining or determine)                                       | US-PGPUB;<br>USPAT | OR | ON  | 2008/03/31<br>00:47 |

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|-----|-----|--|--------------------|----|----|---------------------|
| S81 | 68  | (oxidation or reducton)<br>with (functional adj<br>group) with (binding or<br>immobilization or<br>immobilizing)   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>01:54 |
| S82 | 71  | (oxidation or reducton)<br>with (functional adj<br>group) with<br>(functionalizing or binding<br>or immobilization or<br>immobilizing)   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>01:57 |
| S83 | 19  | S82 and (electric)   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>01:57 |
| S84 | 25  | S82 and (electric or<br>electrode)   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>01:57 |
| S85 | 152 | (electrode or electric) with<br>(functional adj group)<br>with (functionalizing or<br>binding or immobilization<br>or immobilizing)  | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>02:01 |
| S86 | 152 | (electrode or electric) with<br>(functional adj group)<br>with (functionalizing or<br>binding or immobilization<br>or immobilizing) with<br>(molecule or probe or<br>chemical or group)                | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>02:02 |
| S87 | 444 | (electric adj field) with<br>((functional adj group) or<br>(functionalizing or binding<br>or immobilization or<br>immobilizing) with<br>(molecule or probe or<br>chemical or group))                   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>02:09 |
| S88 | 240 | (electric adj field) with<br>((functional adj group) or<br>(functionalizing or<br>immobilization or<br>immobilizing) with<br>(molecule or probe or<br>chemical or group))                              | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>02:09 |
| S89 | 5   | (electric adj field) with<br>(inducing or induce) with<br>((functional adj group) or<br>(functionalizing or<br>immobilization or<br>immobilizing) with<br>(molecule or probe or<br>chemical or group)) | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>02:09 |
| S90 | 111 | (electric adj field) with<br>(inducing or induce) with<br>reaction   | US-PGPUB;<br>USPAT | OR | ON | 2008/03/31<br>02:13 |

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|------|-------|---|--------------------|----|-----|---------------------|
| S91  | 31    | (electric adj field) with<br>(inducing or induce) with<br>reaction with chemical  | US-PGPUB;<br>USPAT | OR | ON  | 2008/03/31<br>02:13 |
| S92  | 0     | (reference adj data) same<br>(interspot)  | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/04<br>22:58 |
| S93  | 20    | (reference adj data) same<br>(between with spots)   | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/04<br>22:59 |
| S94  | 162   | (reference adj spots) and<br>(assay or immunoassay)   | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/04<br>23:17 |
| S95  | 16    | S94 and microfluidic  | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/04<br>23:17 |
| S96  | 12267 | ((activate or activated or<br>activating) with (chemical<br>or chemically)) and (assay<br>or immunoassay or<br>microarray)  | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/04<br>23:43 |
| S97  | 56    | ((((activate or activated or<br>activating) with (chemical<br>or chemically)) same<br>(microfluidic or<br>microchannel)) and (assay<br>or immunoassay or<br>microarray) | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/04<br>23:43 |
| S98  | 56    | ((((activate or activated or<br>activating) with (chemical<br>or chemically)) same<br>(microfluidic or<br>microchannel)) and (assay<br>or immunoassay or<br>microarray) | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/05<br>20:55 |
| S99  | 162   | (reference adj spots) and<br>(assay or immunoassay)   | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/05<br>20:56 |
| S100 | 16    | S99 and microfluidic  | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/05<br>20:56 |
| S101 | 1     | ("6200814").PN.   | USPAT;<br>USOCR    | OR | OFF | 2008/11/05<br>22:08 |
| S102 | 0     | kinetic with<br>(measurement) with<br>without with regeneration   | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/05<br>22:48 |
| S103 | 4     | kinetic with<br>(measurement) with<br>regeneration  | US-PGPUB;<br>USPAT | OR | ON  | 2008/11/05<br>22:48 |
| S104 | 1     | ("6193864").PN.   | USPAT;<br>USOCR    | OR | OFF | 2009/08/01<br>23:40 |
| S105 | 1     | ("6348156").PN.   | USPAT;<br>USOCR    | OR | OFF | 2009/08/01<br>23:44 |
| S106 | 1     | "20020091057"   | US-PGPUB;<br>USPAT | OR | OFF | 2009/08/02<br>17:14 |



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|------|------|--|--------------------|----|-----|---------------------|
| S107 | 1    | ("6193864").PN.  | USPAT;<br>USOCR    | OR | OFF | 2009/08/02<br>19:56 |
| S108 | 1    | ("4668399").PN.  | USPAT;<br>USOCR    | OR | OFF | 2009/08/02<br>20:27 |
| S110 | 6025 | ((multiple or plurality)<br>with filters) same (cells or<br>proteins or solutes) | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>20:30 |
| S111 | 85   | ((multiple or plurality)<br>with filters) same (red adj<br>blood adj cells)      | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>20:31 |
| S112 | 75   | S111 not @ay> "2005"   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>20:31 |
| S113 | 13   | ((multiple or plurality)<br>adj2 filters) same (red adj<br>blood adj cells)      | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>20:33 |
| S114 | 12   | S113 not @ay> "2005"   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>20:33 |
| S115 | 63   | S112 not S114  | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>20:39 |
| S116 | 1    | ("4596657").PN.  | USPAT;<br>USOCR    | OR | OFF | 2009/08/02<br>21:07 |
| S117 | 1    | S116 and filter  | USPAT              | OR | OFF | 2009/08/02<br>21:07 |
| S118 | 105  | "4810378"  | USPAT              | OR | OFF | 2009/08/02<br>21:09 |
| S119 | 1    | ("4810378").PN.  | USPAT;<br>USOCR    | OR | OFF | 2009/08/02<br>21:10 |
| S120 | 0    | ("L13andfilter").PN.   | USPAT;<br>USOCR    | OR | OFF | 2009/08/02<br>21:10 |
| S121 | 1    | S119 and filter  | USPAT              | OR | OFF | 2009/08/02<br>21:10 |
| S122 | 90   | "5089146"  | USPAT              | OR | OFF | 2009/08/02<br>21:15 |
| S123 | 1    | ("5089146").PN.  | USPAT;<br>USOCR    | OR | OFF | 2009/08/02<br>21:15 |
| S124 | 1    | S123 and filter  | USPAT              | OR | OFF | 2009/08/02<br>21:16 |
| S125 | 1280 | ((multiple or plurality)<br>adj2 filters) same (cells or<br>proteins or solutes) | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:18 |
| S126 | 1052 | S125 not @ay> "2005"   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:19 |
| S127 | 1051 | S126 not S115  | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:19 |
| S128 | 662  | ((multiple or plurality)<br>adj2 filters) with (cells or<br>proteins or solutes) | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:19 |

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|------|-------|---|--------------------|----|-----|---------------------|
| S129 | 559   | S128 not @ay> "2005"  | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:19 |
| S130 | 558   | S129 not S115   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:20 |
| S131 | 81    | (additional adj filters) with<br>(cells or proteins or<br>solute)   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:38 |
| S132 | 66    | S131 not @ay> "2005"  | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:38 |
| S133 | 66    | S132 not S115   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:38 |
| S134 | 515   | S130 not @ay> "2004"  | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:57 |
| S135 | 508   | S134 not S133   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>21:58 |
| S136 | 91    | S135 and (plasma or<br>biological)  | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>22:00 |
| S137 | 103   | S135 and (plasma or<br>biological or blood)   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>22:00 |
| S138 | 99    | (cascade adj filtration)<br>and (plasma or blood)   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>22:51 |
| S139 | 1     | S138 and (closed with<br>circuit)   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/02<br>22:51 |
| S140 | 1     | ("5605627").PN.   | USPAT;<br>USOCR    | OR | OFF | 2009/08/02<br>23:07 |
| S141 | 0     | ("I34andfilter").PN.  | USPAT;<br>USOCR    | OR | OFF | 2009/08/02<br>23:08 |
| S142 | 1     | S140 and filter   | USPAT              | OR | OFF | 2009/08/02<br>23:08 |
| S143 | 10095 | ((cell or plasma) with<br>(separation or<br>fractionation)) and filters   | US-PGPUB;<br>USPAT | OR | OFF | 2009/08/02<br>23:34 |
| S144 | 2     | ((cell or plasma) with<br>(separation or<br>fractionation)) and<br>(successive adj filters)                                 | US-PGPUB;<br>USPAT | OR | OFF | 2009/08/02<br>23:34 |
| S145 | 180   | ((pump or pumping) same<br>(roller with membrane))<br>and (assay or biological or<br>protein or molecule or<br>biomolecule) | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/03<br>03:11 |
| S146 | 124   | S145 not @ay> "2004"  | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/03<br>03:11 |
| S147 | 1     | ("6348156").PN.   | USPAT;<br>USOCR    | OR | OFF | 2009/08/03<br>06:01 |
| S148 | 1     | (permeation adj ratio)<br>same (microglobulin with<br>albumin)  | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/03<br>10:07 |

|      |      |  |                    |    |     |                     |
|------|------|--|--------------------|----|-----|---------------------|
| S149 | 0    | filter with (microglobulin with albumin)   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/03<br>10:08 |
| S150 | 50   | (filter or filtering or separate or separating or remove or removal or removing) same (microglobulin with albumin)   | US-PGPUB;<br>USPAT | OR | ON  | 2009/08/03<br>10:08 |
| S151 | 373  | ((avoid or avoiding) with (regeneration or regenerating)) and (assay or assaying or immunoassay or antibody or antigen or nucleic or dna or biological or biomolecule) | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>20:12 |
| S152 | 279  | S151 not @ay> "2004"   | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>20:13 |
| S153 | 97   | S152 and (concentration with (increase or increasing or gradient or decrease or decreasing or gradually or gradually))   | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>20:14 |
| S154 | 55   | S153 and (simultaneously or simultaneous)  | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>20:14 |
| S155 | 1    | ("6200814").PN.  | USPAT;<br>USOCR    | OR | OFF | 2010/03/17<br>22:25 |
| S156 | 1046 | ((rotate or rotating or rotatable) with (channel or microchannel)) and (assay or immunoassay or antibody or antigen or nucleic or dna)                                 | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>23:08 |
| S157 | 69   | ((rotate or rotating or rotatable) adj2 (channel or microchannel)) and (assay or immunoassay or antibody or antigen or nucleic or dna)                                 | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>23:09 |
| S158 | 45   | S157 not @ay> "2004"   | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>23:09 |
| S159 | 2    | S158 and (((rotate or rotating or rotatable) adj2 (channel or microchannel)) with (array or microarray))   | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>23:15 |
| S160 | 16   | S158 and (((rotate or rotating or rotatable) with (channel or microchannel)) with (array or microarray))   | US-PGPUB;<br>USPAT | OR | ON  | 2010/03/17<br>23:16 |

|      |     |  |                              |    |     |                     |
|------|-----|--|------------------------------|----|-----|---------------------|
| S161 | 1   | ("20060210984").PN.  | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2010/03/18<br>23:53 |
| S162 | 0   | (total adj internal adj<br>fluorescence) same<br>((simultaneous or<br>simultaneously) with<br>(detection or detected or<br>detecting or detect)) | US-PGPUB;<br>USPAT           | OR | OFF | 2010/03/19<br>00:01 |
| S163 | 0   | (total adj internal adj<br>fluorescence) same<br>((simultaneous or<br>simultaneously) with<br>(detection or detected or<br>detecting or detect)) | US-PGPUB;<br>USPAT           | OR | OFF | 2010/03/19<br>00:02 |
| S164 | 9   | (total adj internal adj<br>fluorescence) and<br>((simultaneous or<br>simultaneously) with<br>(detection or detected or<br>detecting or detect))  | US-PGPUB;<br>USPAT           | OR | OFF | 2010/03/19<br>00:02 |
| S165 | 9   | (total adj internal adj<br>fluorescence) and (array<br>with (detection or<br>detected or detecting or<br>detect))                                | US-PGPUB;<br>USPAT           | OR | OFF | 2010/03/19<br>00:13 |
| S166 | 1   | S165 not S164  | US-PGPUB;<br>USPAT           | OR | OFF | 2010/03/19<br>00:13 |
| S167 | 18  | (total adj internal adj<br>fluorescence)   | US-PGPUB;<br>USPAT           | OR | OFF | 2010/03/19<br>00:17 |
| S168 | 1   | ("6200814").PN.  | USPAT;<br>USOCR              | OR | OFF | 2010/03/19<br>00:23 |
| S169 | 541 | ( surface adj plasmon adj<br>resonance) with (array or<br>microarray)  | US-PGPUB;<br>USPAT           | OR | OFF | 2010/03/19<br>14:03 |
| S170 | 22  | ( surface adj plasmon adj<br>resonance) with (array or<br>microarray) with<br>(simultaneous or<br>simultaneously)                                | US-PGPUB;<br>USPAT           | OR | OFF | 2010/03/19<br>14:03 |

**3/ 19/ 2010 6:00:45 PM**

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